

toast, crackers, rice, cornbread; the drier the bread-stuffs are eaten the better they will be assimilated, as they are thereby better insalivated.

Where there is no serious anatomical disease, a suitable diet will cure, and even where there is, a suitable diet will often greatly relieve. Of chief importance in prescribing a diet in chronic disease, that the quantity must not be reduced below the physiologic minimum; a quantity that will furnish 2300 calories; this is, roughly, equal to 400 grammes bread, 200 grammes roast meat, 75 grammes fat. Roast meat presumably disagreeing, any form of proteid food may be substituted: milk, soft eggs, brains, tripe, boiled fish, minced meats; all foods must be in a finely divided state; milk as a liquid is in a finely divided state, and yet it often oppresses the stomach like meat, because when taken into some stomachs it coagulates into large, hard lumps, which have the same effect as similar pieces of meat; when milk oppresses it should be modified by heating with some cereal, or given as buttermilk, junket, or peptonized. Meats must be minced after cooking, as that process causes the fine pieces to cohere in large lumps nearly as tough as before. Cream, olive oil, plain or emulsified, butter, bacon fat, beef fat, may be substituted for each other according to the taste, as they are equivalent in nutrition.

## SOCIETY REPORTS

### ALAMEDA COUNTY.

The meeting of the Alameda Medical Association, for February 15th, was called to order at 8:40 p. m., Dr. Dukes in the chair.

On motion reading of the minutes of the previous meeting was dispensed with.

Dr. von Adelung presented an interesting case of filariasis also chylous urine and microscopical specimen. Patient improving under Wherry McDill treatment.

Dr. Crosby reported having this patient in his care for some weeks about one year ago. At first urine was clear, after about two weeks became chylous, than cleared again.

Dr. Wellman stated that in this case the filaria decreased from 500 per c. c. to 100 during cinchonization. Experiments by Dr. Wellman are now in progress to determine whether mosquitoes indigenous to Oakland may disseminate the disease.

Owing to Dr. Emerson's illness, his paper on the "Surgical Anatomy of the Stomach and Duodenum" with demonstration, had to be omitted.

Also Dr. Rowell's paper on the "Physiology of the Stomach," he not being able to attend the meeting.

Dr. McClurg's paper on "Laboratory Findings in Gastric Ulcer" was read by Dr. Powell.

Dr. Boyes presented a paper on the "Symptomology and Treatment of Gastric Ulcer."

Dr. Hamlin gave a paper on "Gastroenterostomy," demonstrating the operation with drawings.

Dr. Clark presented a patient upon whom gastroenterostomy had been performed. Patient had regained weight, felt well and digestion good.

The cases presented and the papers read brought out an interesting discussion.

Dr. Stratton sounded the warning not to place too much dependence on laboratory findings at the expense of clinical symptoms, such as time of pain, localized tenderness, etc. He had seen perforated ulcers healed without vestige of a scar remaining, having had the opportunity of seeing the patient at necropsy.

Dr. Dudley Smith differed with Dr. Boyes in the use of atropin to control hemorrhage in gastric ulcer.

Dr. Dukes considered the ice bag useless excepting as it compels the patient to remain quiet.

Dr. Green stated that he thought the benefit derived from the ice bag or cake was due mostly to pressure. He had used gelatin with reasonable success in gastric ulcer.

Dr. Ewer pointed out that atropin controls hemorrhage by dilating the peripheral capillaries and ice by contracting them.

Dr. Clark said that the medical treatment had been well brought out, gastric ulcer should be treated medically from one to six months before calling in the surgeon. He emphasized the frequency of a carcinoma implanted upon the base of an ulcer giving symptoms of indigestion or neuralgia. Dr. Clark prefers double Roosevelt forceps to the single in the operation for gastroenterostomy. Dr. Hamlin preferring the single.

Dr. Crosby had seen a case of tabes operated on for gastric ulcer.

Dr. von Adelung uses hypodermic and rectal medication in gastric ulcer and prefers morphin to the ice bag to quiet patient. He emphasizes possibility of ulcer healing under medical treatment even after recurrence and tumor formation.

Dr. Pratt thinks that both atropin and adrenalin do good as long as too large doses are not prescribed.

Dr. Hamlin, in closing the discussion, stated that choice of drugs depended upon pathology of the hemorrhage, adrenalin to control capillary bleeding; atropin, bleeding from the larger vessels.

Following the discussion the association had the pleasure of listening to an interesting talk from Dr. James H. Parkinson, president of the State Society, who briefly outlined the program for the state meeting at Sacramento and emphasized the need of our practicing more gregariously and of consulting more with each other, also the need of stronger and better organization and a more elastic fee bill.

We should increase County Society membership, it helps to elevate individual standards. Character of the State Journal rests with us entirely. He advocated medical defense being taken up by the State Society and that county societies should be more active in regard to legislative matters. At the close of Dr. Parkinson's remarks the president appointed the following committees:

Program Committee: Drs. Lum, Adams and Powell.

Milk Commission: Drs. McCleve, Shuey, Hamilton, Rowe, and Nusbaumer.

On motion, to appoint committee to arrange for annual banquet, the chair appointed the program committee to act as a banquet committee.

After adjournment refreshments were served and a social hour enjoyed.

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The regular monthly meeting of the Alameda Medical Association for March was called to order at 8:20 p. m., President C. A. Dukes in the chair. The minutes of the two previous meetings were read and approved.

Dr. Stratton presented two clinical reports showing results of modern therapy in renal lesions. The first report dealt with a patient who had pain in the right dorsal lumbar region and bladder. Much pus and albumin in the urine. Illness extended over a period of some two months without yielding to usual medication. At that time a bacteriological examination of the urine showed colon infection; a bacterin from same was made. Now some seventy-eight days and patient doing well, it being some forty-three days since last recrudescence. Urinary antiseptics were continued in connection with vaccine treatment. Second case: A young woman who had been operated on twice, once for perinephritic

abscess and once for septic peritonitis. When seen by Dr. Stratton had poor health, pain in left side and a mass size of an orange. Sinus in scar in lumbar region. Bismuth paste injected. X-Ray showed sinus leading to site of kidney and about one inch below crest of ilium. Bismuth paste treatment continued for about five months. Liquid mixture always used. Next seen on January, 1910; condition, local and general, continued to improve after treatments were discontinued until sinus and pain had disappeared. Gain in weight, color and health.

Dr. von Adelung presented a case of Adiposis Dolorosa. He first saw the patient January 14, 1910. She complained of pain, swelling of the legs, weakness and nervousness; trouble dates to an exposure to dampness during menstruation nineteen years ago while cleaning house.

The exposure brought on rheumatic attack (inflammatory) in both ankles and both knees. On attempting to examine her, it was noted that she was sensitive to the pressure of the finger. This, together with unusual fat formation, led directly to the diagnosis, which later was endorsed by Dr. Herbert Moffit in consultation. Her arms and legs are much enlarged but do not pit although very tender. So tender that the application of the pneumatic bag necessary for the use of the Sphygmomanometer was endured by her with great pain. The fat is located mainly in the arms above the elbow over which it drops in a thick fold; and on the thighs to the knees at which point it again droops, and on the abdomen, where it forms a huge pendulous mass. The face, hands and feet are normal. The patient is weak physically, neurasthenic, and psychasthenic. Knee jerks are absent, constant headaches and vomits nearly every night. The skin is normal, the blood pressure is 147, the blood count normal, the hemoglobin normal. She urinates frequently day and night, passing seventy-seven ounces in twenty-four hours, but the urinalysis is otherwise normal. Her weight is 251. Menstruation ceased last October. She is 54 years old. Thyroid not palpable. Pulse 92, Cardiac palpitation, heart sounds normal.

Dr. Case presented two patients addicted to the use of morphin and outlined his treatment in each case.

Dr. W. A. Clark's patient failing to be present, demonstrations of the open method of reducing fractures had to be omitted.

Dr. Martin Fischer presented his subject, "The Nature, Cause and Treatment of Edema," demonstrating the same with frogs, drawings and pathological specimens.

Dr. H. G. Thomas' paper, "The Nature, Cause and Treatment of Glaucoma" (with demonstration), had to be omitted. Dr. Thomas being indisposed.

Discussion on Dr. Fischer's paper:

Dr. Briggs: Why is there an edema in diabetes, which is an acidosis, and what causes pulmonary edema?

Dr. von Adelung: Are the facts given in this paper applicable also to the angioneurotic edemas which are due to vasomotor conditions? Are these also explained by asphyxia of the locality?

Dr. Emerson: I saw an angioneurotic edema in the sublingual tissue and to do something for relief, made an incision, but to my surprise found no fluid.

Dr. Galraith: Why does a drop of atropin in a person of middle age sometimes cause glaucoma? Is that due to decrease of oxygen? Dr. Henry Lathan of Philadelphia and others claim that colloids are dialysable. Is that the same principle?

Dr. Stratton: Why is edema most marked at the dependent parts? Is it due to general dioxidation? We would also like to hear more details as to treatment.

Dr. T. H. Clark: Why localization of edema about the eyes in arsenical poisoning?

Dr. Fischer: Diabetes is not primarily an acidosis; not as much so as some other diseases. The coma of the final stages may be due to edema of the brain. Pulmonary edema is not due to interference with the pulmonary circulation. Tying of pulmonary vein does not cause it but interference with the systemic circulation and shutting off of the bronchial arteries. The fluid is in the lung tissue before it accumulates in the alveoli. This latter is analogous to accumulation in other body cavities. It is a phenomenon of surface tension. Angioneurotic edema comes only in a person who is "chemically wrong"; add to that some slight injury and a contact reaction occurs. Urticaria from flea bites is due to hypersensitiveness to minute doses of formic acid. It can be influenced by diet; calcholorids relieve it. The same principle holds in chilblains.

Atropin is one of the most vicious alkaloids for causing deoxidation. It is counteracted by sodium citrate. Local predilection of edema, in arsenical poisoning for instance, is due to the fact that the connective tissues around the eyelid have a higher affinity for water than any other in the body, hence they are the first to swell.

In cardiac edema the predilection for the most dependent parts of the body is due to the fact that they being farther away from the heart contain less oxygen. In cardiac affections pulmonary edema is a terminal complication, other tissues farther away from the heart suffer before the lungs do. A patient does not die because he has pulmonary edema but he has pulmonary edema because he is dying. In nephritic disease pulmonary edema is an earlier complication.

Treatment. Edema can be relieved by many things. In the brain, for instance, compression may give relief. It may be relieved by injecting the right kind of salt solution. Death does not come until it is sufficient to shut off the carotid circulation. The pressure on the brain may rise way above that of the circulation as high as 250 to 300. The whole body is a saturated colloid; if you give it salt the colloid shrinks, like the fibrin column and water is given off.

There is no danger to the heart in giving water in toxic edema. Every infection is a function of concentration not of amount. The more water you give a patient with toxic edema the less concentration is there. Water is carried from the intestine to the kidney without any expenditure of energy on the part of the system. Near the intestinal tract the blood has a high concentration of salt, is under-saturated for water, hence water goes into it from the intestines. In the lungs the blood loses the salt so when it comes to the kidney it necessarily gives off that extra water. During this circuit the water absorbs a good many substances.

Under business the following communication was read:

"The Alameda County Dental Society.

"Dr. Charles A. Dukes,

"Alameda County Medical Society,

"Oakland, California.

"Dear Doctor:

"The Alameda County Dental Society is giving a 'theater party' on the evening of April 11th at the Orpheum. The proceeds of the party will be used for the establishment of a free dental clinic. We desire the support of your society and our finance committee have reserved all the boxes for this evening; hoping to dispose of them to the different professional associations.

"Box seats are \$1.00. A representation from your society will be greatly appreciated.

"Respectfully,

"PAUL T. CARRINGTON,

"Secretary."

Owing to the fact that nearly all present had arranged to attend the benefit no official action by the association was taken. Dr. Florence Sylvester, in speaking for the cause, urged the support of the association, in as much as such a clinic was greatly needed.

The following resolution, introduced by Dr. H. N. Rowell, was unanimously adopted and the secretary instructed to transmit a copy to the Board of Supervisors:

"Whereas, By reason of the increasing population of Alameda County the present accommodations for the county poor have become entirely inadequate, and

"Whereas, The Honorable Board of Supervisors of Alameda County, keenly alive to the humane duties devolving upon them, have recognized the absolutely imperative necessity of better facilities for handling the sick and have, by resolution, determined to procure a tract of land and erect hospital buildings of latest type and design, properly equipped within the city limits of Oakland, therefore be it

"Resolved, that the Alameda County Medical Association does hereby congratulate the Honorable Board of Supervisors upon its recent decision, and to offer its assistance in any manner, to the end that our new infirmary be such that it shall reflect credit upon this county generally and afford relief for the increasing number of indigent sick."

Dr. Florence Sylvester called attention to the annual meeting of the Alameda County Association for the study and prevention of tuberculosis to be held on Friday, March 18th, at 8 p. m., at the Chabot Observatory.

There being no further business to come before the association, upon motion duly seconded and carried, the meeting adjourned.

PAULINE NUSBAUMER, Secretary.

## BOOK REVIEWS

**Studies on Immunization and their Application to the Diagnosis and Treatment of Bacterial Infections.** By Sir A. E. Wright, M. D., F. R. S., Director of the Department for Therapeutic Immunization, St. Mary's Hospital, London. Late Professor of Pathology, Army Medical School, Netley. Archibald Constable & Co., Limited, London. 1909.

This volume is a reprint of papers which appeared originally in various English journals. With the exception of technical details, which are promised for a later volume, it represents a full report of the voluminous labors of Wright and his associates in this field during the last twelve years.

The book is divided into two parts, the first dealing with the scientific phases of the subject—the author's theories as to the mechanism of immunity, its production and application, with experiments to prove them; the second with the practical aspect, Wright's vaccine treatment of infections, and the practical value of the opsonic index in diagnosis and as a guide to treatment. The preface contains a concise statement of the author's views as well as a history of their development in his mind. Neither this nor the rather original index which appears in the form of a synopsis, should escape attention.

Very few pieces of research in medicine have found the instant and keen response in interest if not in full acceptance from all over the world, that Wright's work has found; the subject is still one of live interest, and inasmuch as Wright and his associates have done incomparably more and incomparably better work than anyone else, this book will find acceptance as a kind of classic. In the face of the figures given here, to say that any use of the opsonic index is necessarily unreliable is to show

ignorance of the extraordinarily careful and accurate work which has been done in Wright's laboratory. Some of us are honest enough to say that our own estimations of the opsonic index are unreliable, and to believe that the method is far too complicated to make it worth while to spend the great time necessary to attain technical perfection, but that is not to say that technical perfection is impossible. Opsonic therapy has suffered from deductions based on too much careless and slipshod work, especially in this country.

At the same time, brilliant as the papers are in many ways, the author will find few in any other country than his own who will follow him so far in ascribing almost exclusive importance in immunity to opsonins, or to phagocytosis. We cannot escape an impression of one-sidedness in reading this volume. Metchnikoff's original propositions on phagocytosis have steadily lost rather than gained ground in the light of newer studies on serum and immunity, such as those by his own pupils, Bordet and Gengou, and by Ehrlich and a host of German observers.

The book, however, will repay careful reading by everyone at all interested in vaccine-therapy, or in the broader field of immunity in general. Perhaps it will serve as a deterrent to the too-common slipshod methods in this field. J. L. W.

**Studies in Immunity.** By Prof. Jules Bordet, Professor of Bacteriology at the University of Brussels, Director of the Pasteur Institute of Brabant, and his Collaborators, collected and translated by Frederick P. Gay, A. B., M. D., Instructor in Pathology, Harvard Medical School.

This volume should attract more than the usual amount of interest, containing as it does many of the researches from which the rapidly enlarging science of immunity took its origin. As the translator suggests in his preface, in this day of the "over-Germanizing" of American science, it may surprise many to discover that not Ehrlich but a Frenchman, Bordet, was not only the pioneer in the newer studies of immunity, but the contributor of a great mass of the most fundamental research. The all-important fact, for example, of the participation of two bodies, alexin and sensitizer or anti-body in all reactions of the immunity type in the animal body, was one of Bordet's early demonstrations, and his complement-fixation test as described in one of these papers (p. 190) is now more generally known in its specialized application as the Wassermann reaction for syphilis, but was widely used by its originator for the detection of a great number of different diseases. Bordet's application of a serum-reaction to the differentiation of blood-stains from different animals has already become of great medico-legal importance.

While this collection consists, except for the last chapter, only of papers which appeared separately, the effect is by no means fragmentary, inasmuch as the problems attacked were the ones basic to the whole subject, the applications of which are general. Among the most interesting papers, partly because they are the first steps in a new direction, and indicate the path which progress must take, are those correlating immunity-reactions with the newest knowledge of physical chemistry—especially the behavior of inorganic as well as organic colloids in reactions which are strictly comparable with those of immunity. It needs no gift of prophecy to foresee that the next great advance in the understanding of the life-process will come with the exploration of the great field of colloid-action, in which Bredig's researches in the inorganic kingdom can be carried almost bodily into the animal.

Bordet is known as the foremost opponent of the Ehrlich side-chain theory. This he attacks very ably and with the utmost good-feeling and courtesy in the